

NUCLEAR DIVISION NEWS

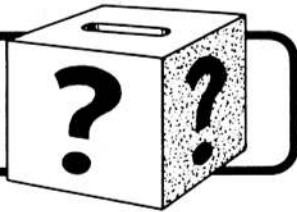
A Newspaper for Employees of the Nuclear Division, Union Carbide Corporation

Vol. 6 - No. 13

NUCLEAR DIVISION NEWS

July 3, 1975

QUESTION BOX



If you have questions on company policy, write the Editor, Nuclear Division News (or telephone your question in, either to the Editor, or to your plant contact). Space limitations may require some editing, but pertinent subject matter will not be omitted. Your name will not be used, and you will be given a personal answer if you so desire.

QUESTION: Could you give me a legitimate reason why there is a department in the Laboratory Division at ORGDP that has not had a promotion within the department or even a consideration outside the department in the past 13 years, even though each man has at least 20-30 years of Company service?

We have new supervisors from Y-12 that will have to be trained in order to carry out the duties that the jobs require, while we have been doing these jobs all these years.

The question is, what happened to the philosophy that promotions would be made from within?

ANSWER: Since you did not specify the department in question, we have researched the entire Laboratory Division promotion activity at ORGDP, and find that for the period stated, employees in every Laboratory department have been promoted.

The promotion from within policy is being followed to the maximum extent possible; however, some jobs must be filled with people with specific job qualifications not available within the division. The transfer of people between K-25 and

Y-12 has been, and will continue to be, of benefit to employees of both plants.

One should recognize that although an employee may have performed his job satisfactorily for many years, he may not have the requisite skills to supervise the job.

QUESTION: A request that consideration be given to limiting smoking during compulsory group meetings was turned down with a flat "no." Is it the attitude of the Company that non-smokers have no rights, but that smokers can pollute the air space anywhere and any time of their choosing? The *Nuclear Division News* carried a small cartoon poster showing a wise horse giving counsel to its off-spring, "If anyone offers you a cigarette, say 'Nay, Nay.'" But if anyone lights up near us, is our only option, "Yea, Yea?"

ANSWER: The matter of non-smokers' and smokers' rights has been reviewed by each of the Nuclear Division installations. No single satisfactory solution has been found since many smokers are as adamant about their right to smoke as non-smokers are annoyed by them doing so.

Some changes have been made; for example, a nonsmoking area has been designated in the HNL cafeteria. We anticipate other changes will be made. In the meantime, we suggest that those employees who object to excessive smoke advise those in their vicinity of this.

(Continued on page 8)

\$27 million poured into economy as Savings Plan settlement made

A cash contribution of more than \$27 million was made Monday, June 30, to Union Carbide Corporation employees in the four facilities in Oak Ridge and Paducah, Ky.

The money was distributed to 12,202 participants in the Carbide Savings Plan. Every two years, participants in the Savings Plan receive the money they have saved, plus a Company contribution, plus interest. Nationwide, this year, the payout to some 52,600 participating Union Carbide employees totalled \$111 million — \$83.5 million in savings, \$17.5 million in Company contributions, and \$10 million in earned interest.

Under the Savings Plan, employees may authorize payroll deductions up to seven and one-half percent of their earnings. The Company contributes 10, 20 and 30 percent of this amount, depending on whether the employee has one, two, or three or more years of Company service.

Union Carbide employees living in Oak Ridge received approximately \$8,700,000. Other employees in Anderson County got about \$2,700,000. Distributions to other areas included: Knox County employees, \$5,300,000; Roane County \$2,500,000; and Loudon County, \$1,100,000. An additional \$4,500,000 was received by employees living in other areas in Tennessee.

Some 1,185 participants in the Paducah Gaseous Diffusion Plant received \$2.2 million in the distribution.

36 area youths work in summer programs

A total of 36 young people from 12 communities is working this summer under the Youth Opportunity Program in the Oak Ridge facilities.

The Youth Opportunity Program is for persons between the ages of 18 and 21 who are either high school graduates, or students planning to continue their education either in college, business, vocational or training schools.

Twenty-five of the participants are working at the Holifield National Laboratory and 11 at the Oak Ridge Gaseous Diffusion Plant.

Home communities of the participants are as follows: Clinton, six; Kingston, Oliver Springs and Sweetwater, five each; Oak Ridge, four; Knoxville, three; Harriman and Powell, two each; and Concord, Lake City, Loudon and Rockwood, one each.

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ROAD IMPROVEMENT — Y-12's Bear Creek Road is undergoing an improvement as part of a hill is being cut away for better visibility. The hill west of West Portal is being partially cut at the entrance to the Rust Engineering shop area, and where coal is shuttled into the Y-12 area. West-



bound traffic from Y-12 has been detoured around the site during construction, which is expected to be completed shortly. The construction is being done for the Energy Research and Development Administration by McDowell-Purcell.

Precious metals recovered in Paducah Plant efforts

Sometime within the next few weeks, the Paducah Gaseous Diffusion Plant will offer for sale to the highest bidder approximately \$71,000 worth of gold recovered from obsolete hardware resulting from programs of U. S. Energy Research and Development Administration installations.

When the bids are taken, it will be the first time in the 10 years of PGDP's precious metal recovery operations that gold has been offered for sale to unlicensed dealers or individuals as well as to licensed gold dealers, according to Glenn Yates of Purchasing Division. Until recently, federal law permitted only licensed dealers to purchase and use gold.

The gold, about 415 fine ounces in ingot form, is held in the possession of the U. S. Treasury Department until the sale is completed. The term "fine ounce" means that the gold has been refined to a better than 99 percent purity by the Treasury Department. There are about 14.5833 fine ounces in a regular pound. The gold was recovered by PGDP from electronic instrumentation where it was used for its corrosion resistance properties.

From Waste Materials

In addition to gold, PGDP also has a program to recover silver from x-ray radiographs used by several ERDA installations.

The Paducah Plant began its precious metal recovery operation in the mid-1969's to salvage gold and silver from waste materials so that the precious metals could be returned to the nation's economy. Funds realized from the sales were distributed to the government-owned plants providing the scrap material from which the gold and silver were extracted.

Over a 10-year period the Plant has sold about \$1,112,000 worth of gold.

The previous gold sale, held November, 1974, had a high bid of about \$171.35 per fine ounce. Using this price as a reference point, the present lot held at the Treasury Department could be worth about \$71,000.

During this same period, the Plant recovered and sold over \$153,000 worth of silver. The last sales price on silver was about \$4.67 per fine ounce, according to Yates.

Impurities Removed

Frank G. Guzy of PGDP's Power, Utilities and Chemicals Division, who directs the recovery operations for both the precious metals, described the process for recovering gold. "The first step involves the use of nitric acid to remove impurities in the gold," Guzy said. "The gold, then in the form of small chips and rings, is melted in a furnace and poured into bars of 10 to 50 troy ounces, depending on the quantity available at any given time. When enough gold has accumulated, these bars are remelted and poured into ingots of 260 to 280 troy ounces."

The gold then is turned over to the Purchasing Division, which forwards it to the Treasury Department in Washington, D. C. The Treasury Department refines the gold to a purity of about 99.9 percent and holds it until the Department is officially notified of bid awards. After its refinement process, the gold is referred to in fine ounces rather than in troy ounces.

Silver Recovery Different

Guzy said the recovery process for silver is somewhat different, since it is received at PGDP in the form of x-ray film (used in the radiography of classified materials). The film is burned in a furnace and the ashes are treated with a borax flux which removes impurities. The silver then is forwarded through the Purchasing Division to the Treasury Department, which further refines the silver and holds it until receiving notification of bid awards.

In the past, the bid invitations for gold were sent to a small list of licensed dealers who advertised in nationally-published metal magazines their desire to buy gold. Silver bids were invited by sending notices to scrap metal dealers and other firms thought to be interested in bidding.



PANNING FOR GOLD — T. E. Franks, left, and P. B. King of the Paducah Plant recover gold scraps from salvaged materials.



POURING GOLD INGOT — PGDP workmen use heat shields and aluminum reflective clothing as they melt gold scraps and pour them into a mold.

WANTED



Y-12 PLANT

CAR POOL MEMBER from East Village area, Oak Ridge, to West Portal, straight day. J. C. Rogers, Plant phone 3-5445, home phone Oak Ridge 482-2891.

JOIN car pool from Broadacres subdivision, Powell, to West or Pine Ridge Portal, straight day. Mike Estep, plant phone 3-7325, home phone Powell 947-0394.

ORGDP

RIDE or will join car pool from Cedar Lane, Inskip, Norwood area, Knoxville, to Portal 1, 7:45 a.m. - 4:15 p.m. shift. Ben H. Walker, plant phone 3-3117, home phone Knoxville 687-7057.

SAVINGS PLAN-PERSONAL INVESTMENT ACCOUNT

Recent unit values:

	Fixed Income Fund	UCC Stock	Equity Investment Fund
1975			
Feb.	11.20	46.90	7.38
Mar.	11.27	54.11	7.64
Apr.	11.35	58.52	8.04
May	11.43	63.83	8.46

Note: Fixed Income Fund unit values reflect interest additions to achieve the guaranteed effective annual interest rate of 8.55% for 1975. Union Carbide stock values are the average cost of stock purchases during the month plus brokerage charges. Equity Investment Fund unit values represent the month-end market value of securities held by the Fund. Dividing the total value by the number of units in the fund establishes the month's unit value - and the price at which new units are added that month.



PRECIOUS METAL — Jan McElya, of the Paducah Gaseous Diffusion Plant, smiles at the thought of holding nearly \$43,000 worth of gold ingot in her hands. The gold was recovered by the Paducah Plant from obsolete hardware and eventually will be forwarded to the U. S. Treasury Department for refinement and sale.



Don't rob the future . . .
Conserve energy now !

Paducah Engineering promotes four to associate engineers

The Paducah Plant Engineering Division has announced the promotion of Dennis M. Herricks, Thomas A. Morris, William F. Cage and Charles R. Charlton to associate design engineers.

Morris, a native of McLeansboro, Ill., received his degree in engineering from Southern Illinois University. He resides on West Jefferson in Paducah with his wife, Leslie.

Herricks came to work with Carbide directly from the University of Kentucky where he earned his electrical engineering degree. A native of Kentucky, he lives on South Friendship Road in Paducah.

Charlton, a native of McCracken County, graduated from Lone Oak High School, and after work at Paducah Community College earned his degree in electrical engineering from the University of Kentucky at Lexington. He is also interested in digital systems and computer design. His residence is on Kimberly Drive, Paducah.

Cage, a native of Cairo, Ill., received a B.S. degree in electrical engineering from the University of Missouri, Rolla. His wife is the former Bea Barbarito and they live in the Saxony Mobile Home Park in Paducah.

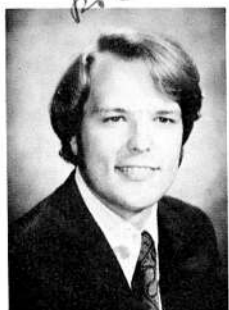
Cage is a member of the Institute of Electrical and Electronic Engineers.



C. R. Charlton



D. M. Herricks



W. F. Cage



T. A. Morris



Charles R. Schmitt and John M. Googin, Y-12 Plant, for "Method of Making Microspheroidal Nuclear Fuels Having Closed Porosity."

Calvin C. Wright and Ralph R. Wright, Oak Ridge Gaseous Diffusion Plant, for "Electro-Galvanic Gold Plating Process."

WJH

Fulkerson named Energy director; will expand division activities

The appointment of William Fulkerson as director of the Energy Division at Holifield National Laboratory has been announced by Murray W. Rosenthal, associate laboratory director for advanced energy systems.

Fulkerson, whose appointment is effective immediately, has served as head of the environmental impacts department, one of the three major organizational units within the division.

The Energy Division was established by the Laboratory in May 1974, with Sam E. Beall as director, to bring together studies concerned with the production, use, and conservation of energy and with the environmental, social, and economic impacts of these activities. Approximately one-third of its professional staff members are specialists in the economic and social sciences.

Beall To Advise

Beall, a member of the Laboratory since 1944 and previous director of the Reactor Division, announced recently that he would step down as director of the Energy Division upon the appointment of a successor. He will continue as a senior adviser and consultant to the division.

In this capacity, Beall will be responsible primarily for development of new areas of activity for the division related to the expanded missions of the Laboratory's principal sponsoring agency, the U.S. Energy Research and Development Administration.

Energy Studies

In addition to its work on environmental impact assessments for energy facilities, the Energy Division also comprises a regional and urban studies department, concerned with population growth and distribution, energy facility site selection, and economic and social impacts of these facilities; an analysis and evaluation department which studies electricity demand, residential energy conservation systems, and potential new sources of energy supply; and special projects, including development of new systems designed to increase the efficiency of power generation and utilization and to provide means for cleaner combustion of existing, abundant energy resources such as coal.

Fulkerson has been a member of the Laboratory staff since 1962, first as a scientist and group leader in the Metals and Ceramics Division. From 1970 to 1972, he was team leader of the material resources and recycling group under the Laboratory's National Science Foundation-sponsored environmental program.

Fields of Interest

Subsequently, he served as coordinator and principal investigator of the NSF/RANN (Research Applied to National Needs) program on ecology and analysis of trace contaminants, which responsibility he has continued in his present position.

His major professional interests have been in the thermal and other physical properties of solids,



William Fulkerson

measurement, transport, and fate of trace contaminants, and preparation of environmental statements for nuclear facilities.

A native of Maryland, Fulkerson received both the B.A. and Ph.D. degrees from Rice University. He is a member of Sigma Xi and the American Society for Metals. He and his wife, the former Julie Montgomery of Houston, Tex., live near Lenoir City.

COMPANY Service

20 25 30

PADUCAH 30 YEARS

Gladys I. Adams, library.

20 YEARS

John W. Tietzen and Robert L. Harris.

LABORATORY 30 YEARS

Harris Blauer, Operations; John A. Ghormley, Chemistry; James M. Walden, Operations; John R. Shugart, Reactor; Ira T. Dudley, Reactor; Joseph X. Khym, Biology; Alex C. Tinley, Instrumentation and Controls; Harvey J. Wyrick, Chemical Technology; Charlie Jones, Plant and Equipment; Hume R. Craft, Health Physics, and Charles Marlow, Jr., Laboratory Protection.

25 YEARS

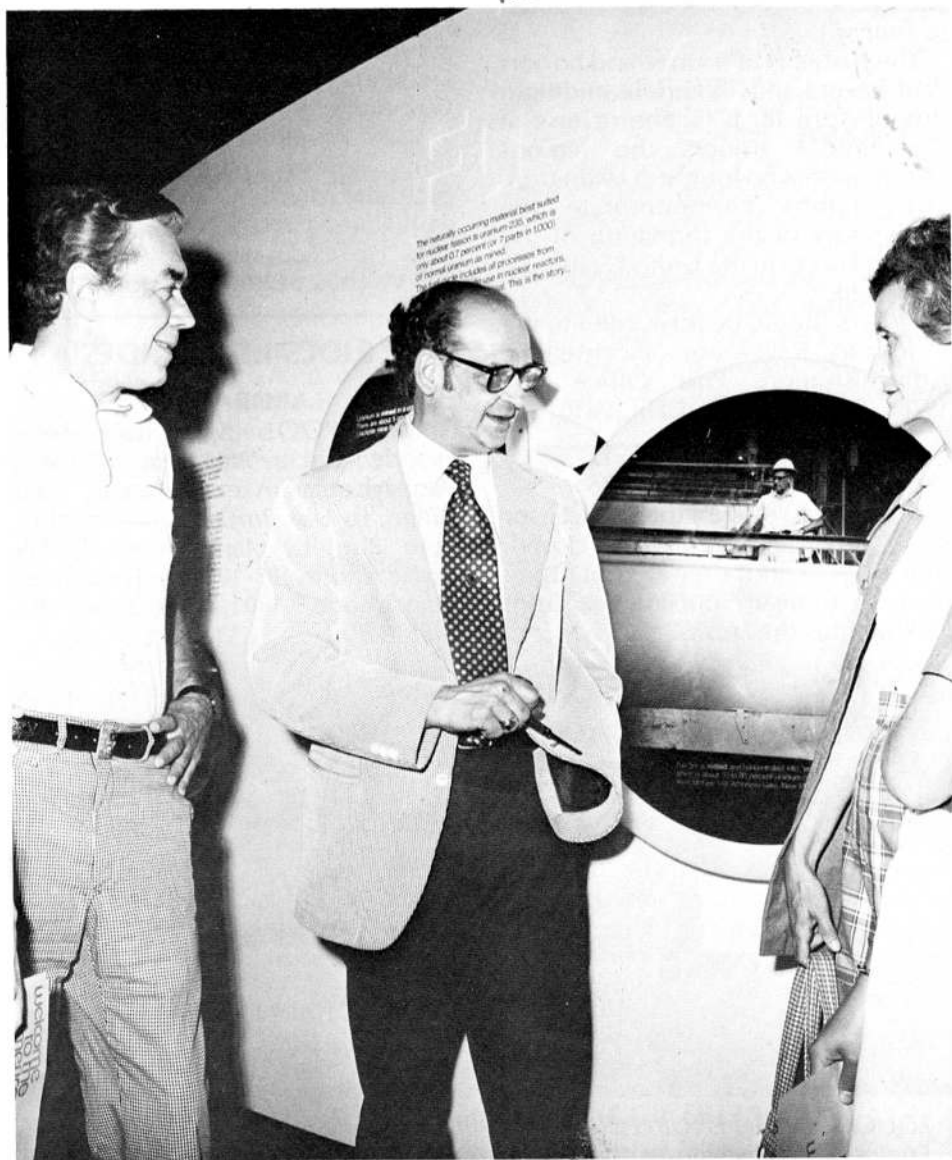
Elijah F. Harness, David R. Clark, Robert E. Moore, Rodger V. Neidigh, Pleas Mitchell, Raymond T. Woods, George A. Cristy, Floyd N. Leathers, Charles M. Carter, James H. Greene and James W. Burris.

20 YEARS

Stanley Cantor, C. S. Lissner, Virginia D. Glidewell, Leslie M. Ferris, Leslie H. Jenkins, Ray H. Henry, James O. Scarbrough, Stephen J. Ditto, Jr., Larry K. Egner, Fred W. Young, Jr., George R. Holloway, Edward Bolling and William E. Rodgers.

Next Issue

The next issue will be dated July 17.
The deadline is July 9.



NEW PRESIDENT OF ANS — Melvin J. Feldman, Chemical Technology Division at Holifield National Laboratory, was installed as president of the American Nuclear Society on June 12 at the Society's 21st annual meeting in New Orleans. The ANS, a nonprofit international scientific, engineering and educational organization, has more than 11,000 members. Feldman discusses the nuclear fuel cycle with visitors to the new American Museum of Atomic Energy in Oak Ridge.



W. L. Beeler



J. A. Braden

A total of 15 Y-12 veterans will be added to retirement rolls at the end of June.

William L. Beeler, area 5 maintenance, came to Y-12 early in 1944. He lives at 114 Bussell Ferry Road, Lenoir City.

Joseph A. Braden, utilities administration, joined Union Carbide in 1951. He retires to his Route 1, Clinton, home.



H. V. Burton



P. L. Cook

Hattie V. Burton, building services, came to work at Y-12 in 1945. She lives in Alcoa.

Paul L. Cook, building, grounds and maintenance services, lives at 4416 Deerfield, Knoxville. He joined Union Carbide in 1951.



D. L. Craig



A. L. Donald

Dawson L. Craig, research services, came to Y-12 in 1956. He lives at Route 18, Hazelnut Drive, Knoxville.

Aubrey L. Donald, electrical and electronics department, lives at 476 West Outer Drive, Oak Ridge. He came to Y-12 in 1954.



T. A. Gardner



E. C. Gross

Thomas A. Gardner, 100 Vernon Road, Oak Ridge, retires from building, grounds and maintenance services. His employment date is 1945.

Earl C. Gross, electrical and electronics, joined Union Carbide in 1947. He lives at Route 1, Caryville.



Division Retirees



R. D. Hayes



C. H. Laughlin

R. D. Hayes, dimensional inspection, joined Union Carbide in 1953. He lives at 154 Hillside Road, Oak Ridge.

Claude H. Laughlin, buildings, grounds and maintenance services, lives at 901 West Sixth Avenue, Lenoir City. He joined Union Carbide in 1952.



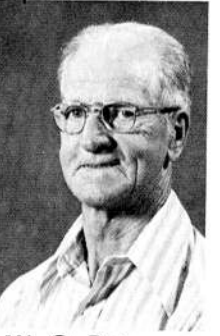
G. McWilliams



C. Patrick

Gene McWilliams, building services, lives at Route 3, Woodland Circle, Clinton. He came to Y-12 in 1947.

Clifford Patrick, building services, hired in 1944. He lives at 2560 Selma Avenue, Knoxville.



W. O. Peterson



D. Price

William O. Peterson, alpha 5 assembly, joined Union Carbide in 1954. He retires to his Route 1, Greenback home.

David Price, electrical and electronics, lives at Route 2, 7804 Bishop Road, Knoxville. He came to Y-12 in 1954.



D. H. Treece

David H. Treece, cafeteria, lives at 2716 Lay Avenue, Knoxville. He joined the Y-12 work force in 1944.



R. L. Lively

Robert L. Lively, shop services department at the Oak Ridge Gaseous Diffusion Plant, will retire at the end of June, ending almost 31 years' company service. He lives at Route 1, Lake City.

Bicentennial medals stamps go on sale

The American Revolution Bicentennial Administration has announced the availability of the 1975 official Bicentennial medal and commemorative stamps to be on sale through July 31.

The medal is part of a series of official Bicentennial medals issued under the authority given by Congress of the United States. The price of the medal and stamp is \$5 for each set ordered. Orders are limited to four sets per order form.

The medal is in bronze and honors Paul Revere and his famous midnight ride of April 18, 1775. The reverse of the medal honors the famous Minutemen who fought at Lexington. The stamps commemorate the anniversary of the formation of the Armed Forces in the United States 200 years ago.

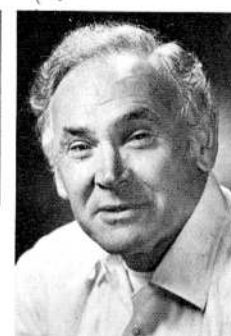
Orders should be forwarded to the American Revolution Bicentennial Administration, Post Office Box 1976S, San Francisco, Calif. 94101.

ENERGY CONSERVERS

Make sure refrigerator and freezer doors are always tightly closed. Replace gaskets if they are not fitting properly to insure outside heat from leaking into the boxes.



B. Orr



H. Swearingin

Two Operations Divisions and two Plant and Equipment Division employees are among July retirees at Holifield National Laboratory.

Burkett Orr has taken early retirement after nearly 25 years' company service. A sheetmetal worker in Plant and Equipment, he resides with his wife, Beulah, at 5724 Davida Drive, Knoxville.

An electrician in Plant and Equipment, Haskell Swearingin has taken early retirement after completing 31 years with Union Carbide. He and his wife, Ruby Ellen, live at 5621 Scenic Hills Road, Knoxville.



H. D. Harris



J. W. Wilson

Howard D. Harris, a nuclear reactor controller in Operations, has taken early retirement after nearly 31 years' company service. He and his wife, Jacquetta, live at 120 Orchard Lane, Oak Ridge.

John W. Wilson, also of Operations, retired from his position as custodial foreman. Wilson had been with Union Carbide since November, 1945. He resides with his wife, Ethel, at 200 Virginia Street, Kingston.

RIDES-RIDES-RIDES

LABORATORY

CAR POOL MEMBERS from Waddell Circle, West Outer Drive or Pennsylvania Avenue areas, Oak Ridge, to East Portal, 8:15 a.m. shift. Tom Burnett, plant phone 3-6939, home phone 483-1975; or Dick Reed, plant phone 3-1801, home phone 483-3458.



EDUCATION IN ENGINEERING — William F. Ferguson, manager, Support Engineering Division of the Nuclear Division's Engineering organization, recently presented certificates to employees at Holifield National Laboratory who successfully completed the "intermediate critical path analyst" course. This course was offered as part of the Division's in-house continuing education program in cooperation with the Laboratory's Personnel Development and Systems Department. From left are, Andy Higginbotham, Arnetha Johnson, Doris Maddux, Ferguson, Janice Ramsey, Marion Ratledge and A. B. Reid.

New positions listed for Waters, Williams

PH75-1584

PH75-1588

**R. L. Waters Jr.****D. C. Williams**

Robert L. Waters Jr. has been named a senior buyer in the Purchasing Division, and Danny C. Williams has been promoted to a supervisor in the Separations Systems Division at the Oak Ridge Gaseous Diffusion Plant.

A native of Quitman, Ga., Waters joined Union Carbide at the Y-12 Plant in 1970, working in the electrical and electronics department. He transferred to ORGDP last year.

He is a graduate of Savannah State College, and worked with Grumman Aircraft while in school.

Married to the former Margean Cash, Waters lives at 104 Principia Lane, Oak Ridge. They have a daughter, Karmen.

Williams was born in Knoxville. He has been at ORGDP approximately one and a half years.

Mrs. Williams is the former Carolyn Ann Lyndon. They have two sons, Charles and John, and live at 173 Outer Drive, Oak Ridge.

Division Death

Johnnie Ray Savage Sr., a senior laboratory technician in the Solid State Division, Holifield National Laboratory, died June 26. He was a 24-year veteran of the Nuclear Division.

Mr. Savage was a member of West Lonsdale Baptist Church.

He is survived by his wife, Mrs. Rozella Cameron Savage, of 3212 Birchwood Road, Knoxville; his parents, Mr. and Mrs. Robert L. Savage of Knoxville, and a twin brother, Roy Savage of Rienzi, Miss.

**Mr. Savage**

Funeral services were held June 29 at West Lonsdale Baptist Church, with the Rev. Leon Mayo officiating. Burial was in Holly Hills Memorial Park.

NUCLEAR DIVISION SAFETY SCOREBOARD

Time worked without a lost-time accident through June 26:

Paducah	51 Days	430,000 Man-Hours
Laboratory	80 Days	1,653,000 Man-Hours
ORGDP	52 Days	1,213,170 Man-Hours
Y-12 Plant	7 Days	675,217 Man-Hours

COMPANY Service

20 25 30

Y-12 PLANT 30 YEARS

Mabel Tyer, Superintendents Division; Howard A. Price, dispatching department; Roberts S. Burdette, chemical services; William E. Gross, B-2 expansion assembly; and Arnold K. Self, Beta 2 chemistry.

25 YEARS

George W. Sharp, James H. Key, Avis Collins, Willie B. Kirk Jr., Arburth M. Maples and Harvey C. Hankins.

20 YEARS

Bruce D. Hale, Freeman R. Castleberry, Wayne D. Turpin, Hoyt C. Houston, Herbert L. Humphries, Charles D. Johnson, Edward F. Gibson, Olan K. Melton, James T. Gent, Donald Branson, Ray F. Wilson and David H. Stephens Jr.

GENERAL STAFF 35 YEARS

**P.C. FOURNEY**

Patrick C. Fournery, Manager of Industrial Relations for the Nuclear Division, joined Union Carbide July 3, 1940 at the Alloy, W. Va. plant. He is a graduate of Concord College, and has worked in the New York office, at Marietta, Ohio, and with Union Carbide International. He was named to his present position in 1968. He and his wife, Ruby, live at 1012 West Outer Drive, Oak Ridge. They have two daughters.

30 YEARS

Jo F. Harvey, General Accounting Division and Harry E. Thompson, ORGDP management services.

25 YEARS

Clayton D. Zerby.

20 YEARS

Jack H. Zeigler, Betty R. Diggs and Janice Z. Soard.

Laboratory Library

Holifield National Laboratory possesses one of the largest scientific libraries in the nation, and has established over 20 information centers on nuclear energy-related fields.



THE RED WEDGE — Shown with the Nuclear Division's first electric car are, from left, Lee Tucker, Dan Nelson and Stan Auerbach of HNL's Environmental Sciences Division.

Lab staff will evaluate electric car

The Nuclear Division's first electric car arrived at Holifield National Laboratory in late May. The CitiCar, made by Sebring Vanguard, Inc., of Florida, is assigned to the Environmental Sciences Division. (ESD).

Sons of Ward, Wilkinson earn Georgia Tech honors

The sons of two Holifield National Laboratory employees were graduated summa cum laude from the Georgia Institute of Technology recently. Donald E. Ward, son of Donald R. Ward of Neutron Physics Division, received a B.S. degree in electrical engineering. William Michael Wilkinson, son of Michael K. Wilkinson, director of the Laboratory's Solid State Division, received a B.S. degree in industrial and systems engineering.

As the top-ranking senior in all three colleges of Georgia Tech, Ward was awarded the Phi Kappa Phi Scholarship Cup. He also received the Senior Award from Eta Kappa Nu, electrical engineering honorary society.

While at Georgia Tech, Ward won the Jack E. Phinizy Scholarship and was elected to membership in Eta Kappa Nu and in Tau Beta Pi and Phi Kappa Phi honorary societies. He will begin graduate studies this fall at Stanford University in California, under a National Science Foundation fellowship.

Wilkinson was named outstanding senior at Georgia Tech for his academic achievements and leadership ability. His college honors include membership in Phi Kappa Phi, Tau Beta Pi engineering honorary society, and Alpha Pi Mu industrial engineering honor society, which he served as vice president. He was the industrial and systems engineering representative on Student Government.

Wilkinson plans to pursue a master's degree in business administration. His wife, the former Theresa Northcutt of Oak Ridge, teaches in the Atlanta public school system.

The small, two-seat car is referred to by employees at the Laboratory as "the red wedge" because of its bright red wedge-shaped body. It is powered by eight 6-volt, lead-acid batteries, and has a direct energy cost of about 0.4¢ per mile. It has a rated range of 55 miles at a maximum speed of 35 miles per hour before its batteries have to be recharged.

According to Stanley Auerbach, Director of Environmental Sciences, the car was assigned to his division because of the diversity of landscape over which employees must travel to perform normal work activities. Initially the vehicle will be used on paved streets, but will be evaluated for potential field use in environmental research areas.

Lee Tucker, ESD, and Charley Abner of the Plant and Equipment Division, are responsible for the maintenance and care of the CitiCar. They will be involved in determining the cost of maintenance, operational efficiency, durability and the frequency of recharging batteries to keep the vehicle in optimum operating condition.

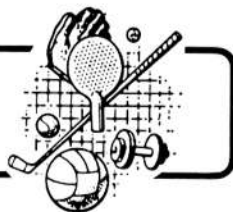
COMPANY Service

20 25 30

ORGDP 30 YEARS

Furman Strang Jr., Plant Superintendent Division; Raymond A. Koteski, utilities operations; Austin F. Payne, cascade coordinators; Robert C. Barnett and Crave R. Page, U-235 separation department; Richard L. Sullivan, machine shop department; Ernest H. Randolph, U-235 separation department; William T. Stigall, guard department; Cecil M. Parker, U-235 separation department; Tommy W. Galloway, instrument fabrication department; Morgan L. Fuller, medical department; Arvil C. Hughes, traffic, receiving and shipping department; Willie M. Loveday, TIA barrier manufacturing; Harvey D. Hans, U-235 separation department; and Amos R. Smartt Jr., dimensional inspection.

RECREATIONOTES



HOLE-IN-ONE FOR SMITH

Earl Smith, Y-12er playing with fellow J-Shifters, fired a hole-in-one last week at Dead Horse Lake. He aced number four, the par three, 130-yarder at the uniquely named course. Smith used a nine iron for the magic miracle.

DISNEYWORLD — SIX FLAGS

If you are planning a trip south this summer or fall and want to see Disneyworld in Florida, or Six Flags over Georgia in Atlanta, you may want to stop by the Recreation Offices. They have discount tickets available for employees and their families to both facilities.

Additional information may be obtained by telephoning extension 3-5833.

PADUCAH PHOTOGRAPHY

Camera bugs in the Paducah Plant will be interested in an exhibit of their art set for October. Categories in the contest will include human interest, children, pets, pictorial, travel, nature and night scenes.

Entries may be submitted in black and white and in color, but must be on an 8 x 10 mount. Prizes will be given for first, second and third places of each category, and a "best of exhibit" award will be made.

More details will follow in the Nuclear Division News.

PADUCAH MIXED SCRABBLE

Ballard Country Club brought out many Paducah golfers, with Elvin Kuehn's team of Della Mae Bryant, Mike Flood, Harry Johnson and Steve Fowler scoring a sub-par round of nine under. Teams captained by Phil Brown and Val Bryant tied for second place, with a seven under par.

Big news of the event was Harry Hook arching a beauty into hole number two for the only ace of the day.

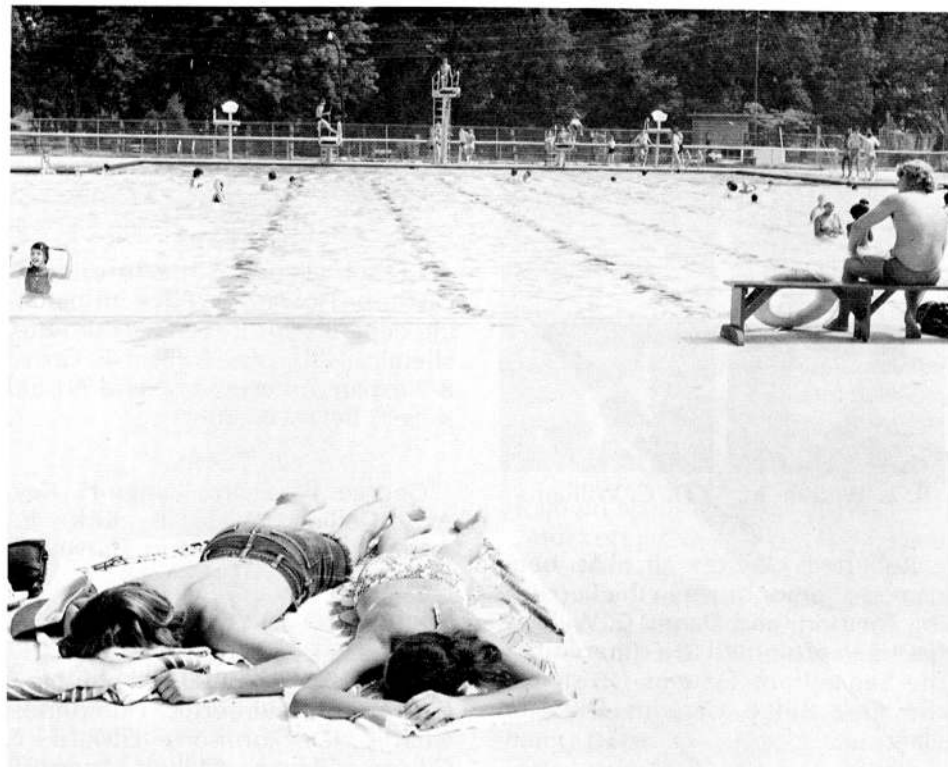
HIGH POWER RIFLE LEAGUE

Y-12's Jack Spurling repeated to win the fifth match of the All Carbide High Power Rifle League with a 475 out of a possible 500. Larry Weston, Laboratory, was second with a 470, and Donald Kiplinger, also of the Laboratory, was third with a 466. Other scores were:

William Galyon, Y-12	465
John Mrochek, Lab	461
T. T. Johnson, Y-12	447
Hugo Bertini, Lab	429
Joe Crowell, Lab	405
Louis Toth, Lab	393
Troy Burklow, ORGDP	390

OAK RIDGE SOCCER

Regular soccer play for the summer has been discontinued, and will be resumed September 3, 5:30 p.m. at the Oak Ridge High School. An announcement will precede the fall play.



THAT'S SWIMMING? — Paducah employees will be interested in the swimming program which began last week at the Bob Noble Swimming Pool. Instructions are available for "Moms and Tots," mothers with children under five; children 5 through 10; 13 and over; and 16 and over ... in beginner's courses all the way to stroke development and drown-proofing and water safety.

PADUCAH SWIMMING

Swimming lessons have started at the Bob Noble Swimming Pool for all Carbide employees in the Paducah Plant and their families. The instructions are held from 9 to 10:30 a.m. each Saturday (with the exception of July 5) through August 30. From 10:30 until noon will be reserved for open swimming.

Beginners from age six to 10, and even "Mom and Tots" swimming for those under five will be featured. There will be advanced instructions, too, including courses in drown proofing and water safety. Instruction, lifeguards, basket and locker room service are all free to employees and members of their family. Children under five must be accompanied by a parent.

ALL CARBIDE SOFTBALL

Through mid-summer play, Artie's Army dominates softball play in the Nuclear League, downing six opponents. The Computes in the Atomic League have lost only one.

LEAGUE STANDINGS:

NUCLEAR LEAGUE

TEAM	WON	LOST
Artie's Army	6	0
The Pubs	6	1
The Rats	5	2
Alphas5	2	
Labor Gang	4	2
Knuckle Balls	4	2
Avengers	4	2
Bio Rejects	4	3
Al's Pals	2	2
Mc's Pack	2	5
Bombers	2	5
Odds & Ends	2	5
The Outlaws	1	3
TAT	1	5
Mama's & Papa's	1	5
Mad Batters	1	6

ATOMIC LEAGUE

TEAM	WON	LOST
Computes	6	1
E. S. D.	6	2
Snakes	3	2
Raiders	4	3
Supersonics	3	4
Shifters	2	3
Gas House Gang	2	4
Red Barons	2	4
K-25 Shift	0	5

PRESIDENTIAL SPORTS AWARD

Many Nuclear Division employees have earned the Presidential Sports Award through the cooperation of the Recreation Department. They will be glad to assist you in the program of your choice. Thirty-eight different sports are included in the categories where athletes may excell.

Included are the following sports: archery, back packing, badminton, basketball, biathlon (cross-country running), bicycling, bowling, canoe-kayak rowing, climbing, equitation (horseback riding), fencing, figure skating, golf, handball, ice skating and jogging.

Also included are exotic sports such as judo, karate, orienteering (another name for running), pentathlon (a combination of running, swimming, fencing, pistol shooting and horseback riding), racquetball, rifle-firing, rowing, rugby, scuba-skin diving, skeet-trap shooting, skiing, both Alpine and Nordic, soccer, softball, squash, swimming, table tennis, team handball, tennis, volleyball, water skiing and weight lifting.

The qualifying standards are rigid, and before undertaking any activity program, it is advised that a thorough medical examination be obtained. This is especially important for persons over 40, or for anyone who has not been physically active on a regular basis.

Additional literature, and rules governing the awarding of certificates, may be obtained from the Recreation Department, Building 9711-5, Y-12; or by calling them on extension 3-5833.

Choose your sport and come on in!

SATURDAY OF MEMORIES PICNIC

The annual Engineering Division picnic was held recently at the Clark Center Recreation Park. The theme was "A Saturday of Memories, an Old-Fashioned Holiday." The 850 attending, including employees from all three Oak Ridge plants, enjoyed the numerous 1920-style activities.

The winners of the major organized games were: softball — instrument

engineering coached by Larry McDonald; tug-of-war contest — experiment engineering coached by Hugh Beeson; and the hole-in-one contest — Hugh Beeson.

The live entertainment, provided by three different bands, pleased many variations of tastes at the picnic.

The barbeque supper was a fitting climax to it all.



OLD-FASHIONED PICNIC — Engineering Division folks and their families are seen enjoying a Saturday at the park, marking an old-fashioned "Roaring 20's" type soiree. Sack-races, tugs-of-war, vintage clothes, softball, and best of all, barbeque, were all enjoyed to the hilt by those attending.

Dangerous allergic reactions to bee stings

By T. A. Lincoln, M.D.

Anaphylactic allergic reactions to Hymenoptera stings are far more common than most people realize. Over 400 deaths were reported to the Insect Sting Subcommittee of the American Academy of Allergy between 1962 and 1972, and were analyzed by Dr. James Barnard of New York City in an article in the *Journal of Allergy and Clinical Immunology* in November, 1973. Many more deaths certainly occurred but were not reported and a large number of nonfatal reactions took place each year. Anyone who has ever had a severe reaction to a bee sting, should be fully aware of its potentially dangerous implications.



Hymenoptera is an order of insects which includes bees, wasps and ants. The stinging members of Hymenoptera can be divided into two general groups; bees and wasps. The honeybees and the bumblebees are vegetarians. The wasps, hornets and yellow jackets are predominantly carnivorous. When members of the bee group sting a human, the barbs of the stinger become stuck in the skin. When the bee is brushed off or struggles to free itself, the whole stinging apparatus is torn from the body and often continues to pump venom into the victim. Part of the gut is also torn out and the bee eventually dies. Members of the wasp group have a cylindrical stinger without barbs. They can, therefore, sting multiple times, the venom being forced into the victim by a strong muscular layer in the venom sac.

In Dr. Barnard's review of the 400 deaths, 69 percent were caused primarily by respiratory tract reactions. Severe swelling, secretions and asthma caused a fatal obstruction to breathing. In 15 percent of the respiratory reactions lung hemorrhage also occurred.

In 24 percent of the fatal reactions, vascular collapse and anaphylactic shock were important. In such cases, blood pressure sometimes rapidly fell to zero. In about 7 percent, the fatal reaction was characterized by swelling of the brain and later degeneration of nerve tissues.

In the fatal reactions, bees accounted for 44 percent, wasps and hornets, 26 percent, yellow jackets, 18 percent and unknowns, 12 percent. The victims received only one to four stings in 78 percent of the cases. About 43 percent of the stings were on the head and neck, 27 percent on the extremities and 9 percent on the trunk.

There appears to be a difference in the time sequence between fatal and nonfatal reactions. In the nonfatal but severe reactions, 96 percent occurred within zero to thirty minutes, while only 49 percent of the fatal reactions occurred in this time period. In 13 percent, the reaction began between one and six hours after the sting and in 8 percent, the severe reaction did

not begin until 24 hours after the sting.

Prompt Treatment

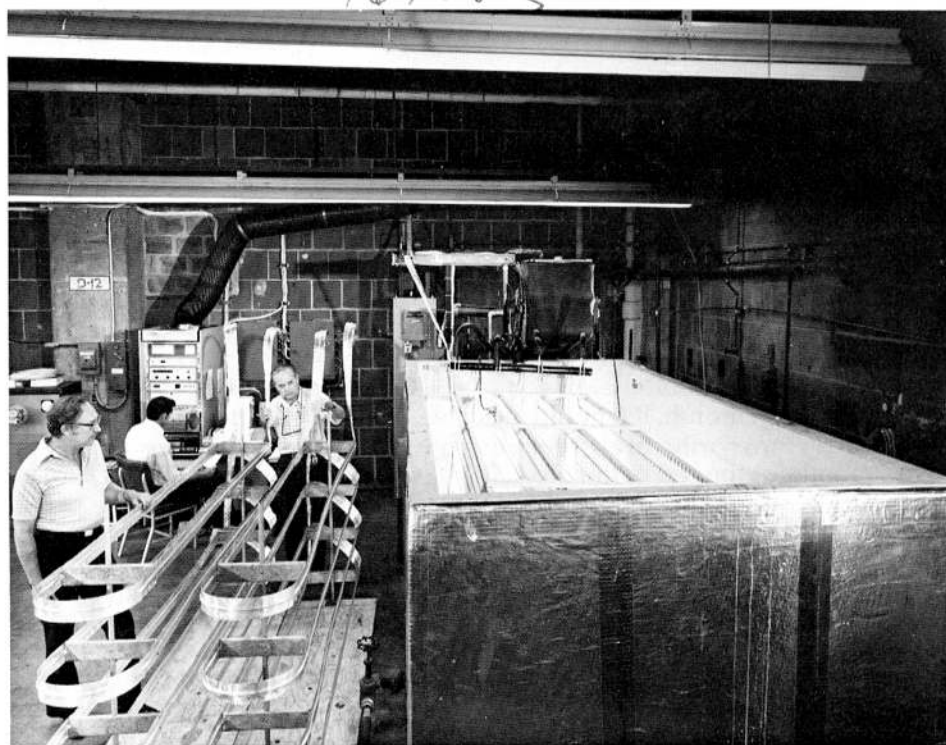
Although prompt treatment was not always successful, it clearly made a big difference. In 100 nonfatal reactions reported in 1970, 15 percent got treatment within ten minutes, 22 percent within ten to thirty minutes and 50 percent within thirty to sixty minutes. Thus, 87 percent of survivors got treatment within the first hour. In 50 fatal reactions, only 6 percent got any treatment within the first hour and 66 percent got no treatment before they were pronounced dead.

In some fatal reactions, the victim had known he was allergic and in a few he was undergoing desensitization treatment. The problem with this type of treatment is that it uses multiple injections of a mixture of whole-body extracts from honeybees, yellow jackets, hornets and wasps. Also, skin testing using whole-body extracts is not particularly reliable. A history of a previous severe reaction, especially one in which there was a vascular reaction, such as fainting, or a respiratory reaction, such as asthma, is the most reliable evidence of dangerous hypersensitivity.

Venom Collecting Difficult

Desensitization is now being developed using Hymenoptera venom, but it is still experimental. Collecting pure venom from bees or wasps is not easy. The bee has to be made to sting through a cellophane membrane and then the venom is collected, dried, weighed, dissolved in saline and sterilized. A large sting contains about 50 micrograms of solids. The desensitization process uses less than 5 micrograms to start with, but gradually builds up until the patient can tolerate about 50 micrograms three times a week.

Anyone known to be hypersensitive to Hymenoptera stings should be desensitized with whole-body extracts even though they are not as effective as the venom extracts. Whenever a sting occurs, a hypersensitive person should get to an emergency room of a hospital as quickly as possible. Special insect allergy kits are available but are expensive. The most effective treatment is to immediately apply a tourniquet on the arm or leg above the site of the sting. If the sting is on the head, neck or trunk applying ice may reduce the speed with which the venom is absorbed. The victim should be given 0.5 ml of epinephrine, 1:1000, in and around the site of the sting. If the reaction is severe, another 0.5 ml should be given subcutaneously in the other arm. Oral medications, such as an antihistamine, are helpful in mild reactions, but are of little or no value in a severe reaction. Hypersensitive individuals should always remember that epinephrine is not very stable. Ideally, it should be purchased in glass ampoules and must be kept out of the sunlight. Any discoloration means it has lost its potency. Even if clear, it may not be effective, so extra ampoules should be kept on hand.



ACES UNIT READIED — An energy storage bin, the principal component of the Annual Cycle Energy System, is under construction at Holifield National Laboratory. The system is designed to make use of the natural weather cycle to reduce the amount of electrical energy required for heating and cooling residential and commercial buildings. The unit seen is about one-eighth of the size of an energy bin required for an average home. Eugene C. Hise, left, of HNL, and Harry C. Fischer, Laboratory consultant and principal developer of the concept, examine the ice collector units which will be installed in the bin. At rear is Eugene Holt, Lab technician.

Health Physics Award to Walter S. Snyder

Walter S. Snyder, a consultant in the Health Physics Division at Holifield National Laboratory, will receive the Health Physics Society's "Distinguished Achievement Award" at the Society's annual meeting July 17.

Snyder joined the Laboratory staff in 1959, having served as a consultant to Health Physics since 1947. He received the M.A. and Ph.D. degrees in mathematics from Ohio State University, and was on the mathematics faculty at The University of Tennessee from 1943 until 1959.



W. S. Snyder

Recently retired as assistant director of the Health Physics Division, Snyder is a past president of the Health Physics Society and an editor of the *Health Physics Journal*. He holds membership in several professional societies and has held office with the International Radiation Protection Association and the International Commission on Radiological Protection. His special interest lies in the field of internal dose.

The Society's award cites Snyder for distinguished contributions to the field of internal dose calculation, to the setting of national and international standards for radioisotope use and exposure, and to both fundamental and applied research in several health physics disciplines.

Hart Honored Posthumously

Also at the annual meeting the Society will present its "Meritorious Performance Award" posthumously to James C. Hart, who was the Society's president at the time of his death in November, 1974. Hart was head of the Health Physics education and information section at the Laboratory.

Calendar of EVENTS

TECHNICAL

July 7

Carnegie Summer Program Seminar Series: "Some Recent Trends in the Support of Research and Research Training Programs at NIH," Thomas Malone, National Institutes of Health. Tower I Conference Room, Building 9207, Y-12, 3 p.m.

July 8

Laboratory Summer Seminar Series: "Is Coal an Option?" G.P. Smith. East Auditorium, Building 4500N, 3 p.m.

July 10

Solid State Division Seminar: "Neutron Damage Simulation by 3-MeV $^{20}\text{Ne}^+$ Bombardment in MgO ," Bruce Evans, Naval Research Laboratory, Washington, D.C. Conference Room, Building 3025, 10 a.m.

NUCLEAR DIVISION NEWS

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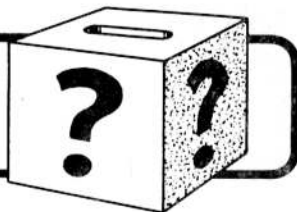
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QUESTION BOX



(Continued from page 1)

QUESTION: I will be 55 in July and at that time will have 28 years of Company service. I can take early retirement and, under the Pension Plan, draw \$400/month. If I should die in August, my wife will receive \$200/month for the rest of her life. If I die in June, she will receive nothing. Question: If I die two months too soon, why should she be penalized \$2400/year for the rest of her life even though my pension rights would have been vested for almost 15 years? This does not seem at all equitable. In fact, the closer I get to age 55 the more likely I will be to stay in bed and be careful not to catch cold or cross the street.

ANSWER: The Pension Plan is designed to produce retirement income and age 55 has been established as the earliest date that can reasonably be thought of as "retirement." For this reason age 55 has been chosen as the earliest time at which a surviving spouse pension benefit can be effective. To make the benefit operative at an earlier date would be simply a special form of life insurance. The cost of providing this "insurance" would reduce the funds available to pay retirement benefits and thus defeat the primary purpose of the Plan.

QUESTION: You indicated in your May 15, 1975 issue that sales of surplus property were advertised. I have never noticed such an ad, but I am interested in such sales. Could you inform me and other interested readers where we might watch for these advertisements?

ANSWER: Sales of general interest such as vehicles and office equipment are advertised in the *Nuclear Division News*, *The Oak Ridger*, and the *Knoxville News-Sentinel*, usually one week prior to the date of sale. Sales of limited interest items such as electrical, materials handling equipment, scrap metals, scrap paper, tires and batteries, etc. are not advertised in the news media but the sales department maintains a bidders list of firms and individuals who have expressed interest in bidding on the various categories. Anyone desiring information about these sales should contact the Purchasing Division Sales Office, extension 3-4601.

QUESTION: Are all the expenses incurred in publishing the *Nuclear Division News* cost-reimbursable under the ERDA-Union Carbide contract or does Union Carbide pay for it out of the 4.4 million dollar management fee? By expenses, I mean editorial staff, printing and other publication costs as well as mailing expenses. Also, does the Nuclear Division consider the *News* to be an employee benefit to be included in the Benefits Cost Box Score total of 36.5 cents per payroll dollar?

ANSWER: All the expenses incurred in publishing the *Nuclear Division News* are reimbursable

under the ERDA-UCC contract. This cost was not included in those shown in the Benefits Cost Box Score total of 36.5 cents per payroll dollar.

QUESTION: From 1968 to 1970 my family and I lived in the area while I was doing thesis research at HNL. One feature we very much enjoyed then was "Carbide Park" and especially the family campground on the lake. Camping was the activity central to nearly all of our use of the park. Subsequent experience at other institutions, in particular Argonne National Laboratory, made me realize how unique the recreational opportunities offered by Carbide Park really were. Thus, we were quite disappointed to find, upon our return last spring, that camping was no longer permitted in the park.

I am unconvinced that the needs for picnicking have expanded so much that the camping area had to be converted (the explanation offered by the Recreation Department). After all, the employment level is not significantly higher now than it was in 1970. Now, after a year of no camping, the Recreation Department should inquire of all employees which way we prefer it — and reopen the former campground if that is the preferred choice.

ANSWER: The decision to discontinue camping was based on a realistic increase in the demand for picnicking, swimming, and boating accommodations (not necessarily related to employment level per se), far outweighing the interest of significantly fewer employees in camping space. We have proceeded with our plan, having completed a new bathhouse and expanded picnic accommodations in that area. We are also proceeding at budgeted pace with plans for an expanded swimming beach, an additional launch pad, and related parking.

We regret the necessity to disappoint the campers; however, our objective to serve the majority should be understandable, particularly in view of the fact that camping facilities are available elsewhere close by.

QUESTION: Many male, salaried employees of the dispatching department have sentiments ranging from feeling coerced and threatened to feeling irate and insulted, due to the requisite that neckties be worn. These employees are especially perturbed when other, higher paid, salaried employees of other departments are seen not wearing neckties. Is it Company policy that all male, salaried personnel wear neckties?

ANSWER: There is not now, nor has there been, a requirement that male, salaried employees wear neckties.

PRESIDENTIAL SPORTS AWARD

Stan Fraley, Laboratory, and his wife, Cathy, recently received the President Sports Award in jogging.

Laboratory divisions announce five promotions

Three Holifield National Laboratory divisions have announced recent promotions. William F. Dickey has been promoted to custodial foreman and William A. Duggins to process foreman, both in Operations Division. In Instrumentation and Controls Division, Wayne W. King and Robert A. Maples have been promoted to senior engineering assistant; and in Plant and Equipment Division, Glen E. Moore has been promoted to welding technologist.

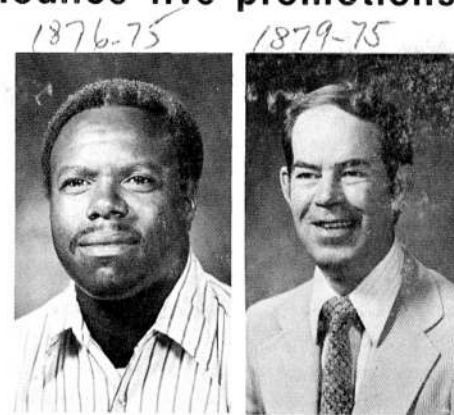
Dickey, who was a guard prior to his promotion, has been at the Laboratory nine years. He is a native of Knox County. He and his wife, Joanne, reside at 104 Prairie Lane, Oak Ridge. They have a daughter.

An Oliver Springs native, Duggins has been with Operations Division since joining the Laboratory staff in 1961. Before his promotion he was a nuclear reactor controller. Duggins and his wife, Jean, have a daughter and live at 401 Columbia Avenue, Knoxville.

King has been with the Nuclear Division 23 years, including six years in the Instrument Department at the Oak Ridge Gaseous Diffusion Plant. He was most recently an instrument technician in Instrumentation and Controls. A Sevier County native, he resides at 7737 Widdecombe Road, Powell, with his wife, Mary. The couple has a son.

Maples has been in Instrumentation and Controls 11 years and was also an instrument technician prior to his promotion. He is a native of Knoxville and resides there with his wife, Shirley, and their three sons at 1419 Cassell Drive.

An 18-year veteran of Plant and Equipment Division, Moore was a welder before his promotion. He was born in Fulton, Miss. Moore and his wife, Lounell, have a daughter and two sons, and live at Route 2, Rockwood.



W. F. Dickey

W. A. Duggins



W.W. King



R. A. Maples

G. E. Moore

Y-12 Had Electromagnetic Plant

The Y-12 area was the site of the electromagnetic plant which was built on a "crash" basis during World War II for the production of uranium 235. After the war, the electromagnetic method of uranium 235 production was discontinued, and the Y-12 Plant was assigned other programs.



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